

ABSTRACT OF THE DISCLOSURE

An optical recording medium including a substrate that includes a substrate material having a refractive index and a plurality of nanoparticles of a material having a refractive index greater than that of the substrate material. The nanoparticles are included in the substrate material at such a density that the refractive index of the substrate is greater than that of the substrate material without decreasing the transparency of the substrate. The optical recording medium also includes a recording layer, which may further include encoded information, and a protective layer.